

CLEMATIS PITCHERI T. & G. VAR. DICTYOTA  
(GREENE) DENNIS, COMB. NOV.  
(RANUNCULACEAE).<sup>1</sup>

W. MICHAEL DENNIS<sup>2</sup>

Department of Botany, University of Tennessee  
Knoxville, Tennessee 37916

*Clematis pitcheri* T. & G. is a highly variable, wide-ranging species distributed on a northeast to southwest clinal axis extending from western Indiana, Illinois, and eastern Iowa south to Hidalgo and Queretaro, Mexico (Dennis, 1976). It is distinguished from other closely related taxa by its non-plumose achene tails. In Gray's Synoptical Flora of North America (1895), Robinson recognized four varieties within the *C. pitcheri* complex. More recently Erickson (1943) recognized only two varieties: *C. pitcheri* T. & G. var. *pitcheri*, which includes those plants with pinnate leaves having leaflets 4–10 cm long and ovate sepals, and *C. pitcheri* var. *filiifera* (Benth.) Robinson, which is distinguished from the type variety by having pinnate-ternate leaves having leaflets less than 4 cm long and lanceolate sepals. *Clematis pitcheri* var. *pitcheri* was ascribed a distribution from Indiana to eastern Nebraska and south to Texas and var. *filiifera* was reported to occur along banks of streams and in canyons of western Texas, New Mexico and Mexico.

In a recent biosystematic study of *Clematis* subsection *Viornae* (Dennis, 1976) it was concluded that Erickson's (1943) recognition of two varieties of *C. pitcheri* on the basis described above is taxonomically unsound. These characters (leaf size, degree of leaf division and flower shape) vary considerably within all members of the subsection suggesting polymorphism and ecotypic variation rather than variation indicative of speciation. However, within *C. pitcheri* var. *filiifera* sensu Erickson there is a morphologically recognizable element that was treated by Erickson (1943) as a synonym of var. *filiifera*. This element is *C. dictyota* Greene, which is herein recognized as a variety of *C. pitcheri*.

CLEMATIS PITCHERI var. **dictyota** (Greene) Dennis *stat. et comb. nov.* Basionym: *Clematis dictyota* Greene, Pittonia 5:133. 1903. TYPE: US, Texas, Limpia Canyon, 26 Apr 1902, Tracy and Earle 256 (Holotype, ND, as photo MO!; Isotypes, TEX! US!). [*Viorna dictyota* (Greene) Heller.] Leaflets generally thicker, smaller and more divided than var. *pitcheri*. Sepals light to brownish purple without, tips recurved

<sup>1</sup> Contribution from the Botanical Laboratory, The University of Tennessee N.S. 512.

<sup>2</sup> Present address: Tennessee Valley Authority, EDB, Muscle Shoals, AL 35660.

and slightly expanded. Filaments and connectives (including extended apex) essentially glabrous or occasionally with a few erect trichomes just below the anthers or along the connective or its extended apex.

*Clematis pitcheri* var. *dictyota* is restricted to soil accumulations among boulders, crevices of rock formations, and stream banks of the Trans Pecos region of western Texas and adjacent New Mexico and Mexico. It is distinguished from var. *pitcheri* by its glabrous filament and anther connectives. Erickson (1943) did not note this character and referred all small leaved plants of Texas and Mexico with both glabrous and pubescent filaments and connectives to *C. pitcheri* var. *filifera*. Correll and Johnston (1970) used pubescence on filaments as a key character to distinguish west Texas populations as *C. filifera* Benth. However, examination of the type specimen of *C. filifera* Benth. [Mexico. Prope Leon, 1839. *Hartweg 1590* (Holotype, K!; Isotype, LD!)] revealed that its filaments were pubescent. Since the most consistent taxonomic character distinguishing the Trans Pecos populations is the absence of trichomes on the filaments, the name *C. filifera* cannot be applied to these plants. Review of previously published names and study of type specimens indicate that *C. dictyota* Greene is the appropriate element upon which to base a taxon representative of the Trans Pecos populations. It was described from the region and its type specimen has glabrous filaments. Varietal status for the plants of the Trans Pecos region based on the name *C. dictyota* is therefore proposed. All small-leaved plants in this complex occurring in New Mexico, Mexico and Texas that have non-plumose achene tails and pubescent filaments, (i.e. *C. filifera* Benth. sensu stricto) are referred to *C. pitcheri* var. *pitcheri*.

#### REFERENCES

- CORRELL, D. S. and M. C. JOHNSTON. 1970. Manual of the vascular plants of Texas. Texas Research Foundation, Renner, Texas. 1881 p.
- DENNIS, W. M. 1976. A biosystematic study of *Clematis* section *Viorna* subsection *Viornae*. Ph.D. dissertation, University of Tennessee. 176 p.
- ERICKSON, R. O. 1943. Taxonomy of *Clematis* section *Viorna*. Ann. Missouri Bot. Gard. 30:1-60.
- GRAY, A. 1895. Ranunculaceae. In B. L. Robinson (ed.), 1895-1897. Synoptical flora of North America, Vol. 1, pt. 1. American Book Co., New York.